Manufacturer: deconta GmbH
Im Geer 20, 46419 Isselburg

Description / Type-No.: Mobile Deduster ME 12
Type 94, 565

Serial-No.: ...............
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1. Basic safety advice

The operation of the equipment must only be carried out by trained competent personnel. The information and instructions contained within this publication are of paramount importance to the user. The manual is always to be kept in the immediate proximity, accessible to all personnel. deconta insists as the equipment user you follow the information and instruction contained within the handbook and only use it in accordance with the regulations and never use this Unit in an inappropriate way. In the event of non-observance, deconta assumes no liability.

To ensure safe operation of the NPU, the following must be strictly observed:

- Do not use in potentially explosive atmospheres.
- Maintenance work, including removal and replacement of the filters, may only be carried out by authorized persons wearing suitable protective clothing.
- The device must be completely disconnected from the power supply during all repairs and maintenance work.
- The safety and protective systems must be maintained and functioning correctly.
- Safety instructions affixed to the unit must be maintained in a legible condition and must be adhered to.
- General, legal and other binding regulations and procedures for accident prevention and handling of hazardous substances must be observed.

To ensure safety, modifications to the device are not permitted. To avoid damage, never operate the unit without built-in filters.

ATTENTION!

The Mobile Deduster is not suitable for use in condensing, corrosive, flammable and explosive atmospheres. The ambient and medium temperature must not exceed 60 °C.

We explicitly point out the additional regional and national safety measures and regulations for the operation of the appliance technology.

The operator must carry out the inspection of the exhaust air at initial acceptance as well as at a minimum gap of 3 years.

In addition to the instruction manual, general, legal and other binding regulations on accident prevention and environmental protection must be observed.
1.1. Intended use

The dust extraction unit is designed for the collection of mineral, metal and other dry fine and coarse dust in the air.

The unit is not suitable for filtering flammable gases or dusts.

The user must comply with the specified operating parameters of this manual. The device may only be used according to its intended use. Any further use beyond this is not intended. The user is liable for any damages or injuries of any kind whatsoever.

1.2. Dangers

<table>
<thead>
<tr>
<th>DANGER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric shock due to faulty mains cable.</td>
</tr>
<tr>
<td>Touching a defective mains cable may result in death or serious injury.</td>
</tr>
<tr>
<td>• Do not damage the mains cable (e.g. by vehicle overrun, tearing, squeezing).</td>
</tr>
<tr>
<td>• Regularly check the mains cable for damage.</td>
</tr>
<tr>
<td>• Have defective mains cable replaced before use by the deconta service or a qualified electrician.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damage due to unsuitable mains voltage.</td>
</tr>
<tr>
<td>The device can be damaged if it is connected to an unsuitable mains voltage.</td>
</tr>
<tr>
<td>• Check whether the voltage indicated on the rating plate matches the local mains voltage.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous materials.</td>
</tr>
<tr>
<td>The following materials may not be filtered:</td>
</tr>
<tr>
<td>• hot materials (glowing cigarettes, hot ash etc.)</td>
</tr>
<tr>
<td>• combustible, explosive, aggressive materials and dusts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WARNING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contaminated Filter.</td>
</tr>
<tr>
<td>• Filter changes may only be carried out by authorized persons, wearing suitable protective clothing.</td>
</tr>
<tr>
<td>• Disposal of filters according to local legal regulations.</td>
</tr>
</tbody>
</table>
2. Transport and storage

2.1. Delivery / Transport

For transportation and moving of the Mobile Deduster unit, it is coupled to a towing vehicle with ball head coupling (requirement see technical data) and pulled to its destination. Transport damages are to be documented immediately when handed over. Additionally take down eventual damages on the freight documents.

2.1.1. Coupling to towing vehicle

- Put towing vehicle and Deduster in Position (Move coupling of Deduster over the trailer ball of towing vehicle)
- Pull stabilization handle (Pos.1) upwards
- Put opened coupling (Pos.2 coupling handle pulled upwards) by winding down of support wheel on the trailer ball of the towing vehicle
- Release coupling handle ⇒ handle slides back independently into original position
- Use our hand to press down handle ⇒ locking and securing is done automatically
- Press stabilisation handle downwards
- Pull up support wheel and lock pointing in driving direction
- Fasten breakaway cable to eyelet of trailer coupling (towing vehicle)
- Plug in light connector of Deduster into socket of towing vehicle
- Check lighting of Deduster

Attention: It is only coupled correctly, if the green edge of the safety indicator (Pos.3) is visible.
2.1.2. Uncoupling
- Wind down support wheel
- Release both breakaway cable and light connector
- Pull stabilisation handle (Pos.1) upwards
- Pull coupling handle (Pos.2) forcibly upwards
- Lift coupling off trailer ball of towing vehicle

**Safety instructions:**
The trailer coupling may only be operated by one person when opened and closed.

2.2. Storage
To avoid any damages the unit may only be parked in areas inaccessible for unauthorized persons.

3. Volume of delivery
Regardless if the unit is purchased or rented, unless no other agreements have been made, the volume of delivery of the Mobile Deduster consists of:

- Unit ME 12
- Instruction manual
- Stoppers

**Return delivery after ending of rental period**
For the protection of our clients and in accordance with the rules for hazmat transport, we must insist on the following return delivery conditions:

- complete as stated above
- thoroughly cleaned (ready-to-operate), with emptied dust bunker
- free from any adhesive residue
- without fibre binding
- without damages
4. Technical data

4.1. Connections, dimensions and weights

- Power connection : 400V 32A 3 N  PE
- Hose connection : 2 x ∅ 300 mm
- Length (incl. drawbar) : ca. 5200 mm
- Width : ca. 2000 mm
- Height : ca. 2010 mm
- Weight : ca. 1400 Kg

4.2. Performance data

- Exhaust air volume : up to 12000 m³/h
- Suction speed : up to 25 m/s
- Bunkervolumen : ca. 0,5 m³
- Shock valve G1 : 12 pcs
- Control : electric 12 channels
- Dedusting : continuously
- Operating pressure : 4,5bar

4.3. Filter data 1. Filter stage (regenerative Filter)

- Filter material : Polyester needle, pleated
- Filter area : ca. 100m²
- Quantity filters : 24 pcs
- Filter resistance : 4300 Pa
- Clean air concentration : < 0,15mg/m³
4.4. Filter data 2. Filter stage (HEPA-Filter)

<table>
<thead>
<tr>
<th>Frame</th>
<th>Plastic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter medium</td>
<td>Micro-Glas fibre paper</td>
</tr>
<tr>
<td>Casting compound</td>
<td>Polyurethane</td>
</tr>
<tr>
<td>Sealing</td>
<td>Polyurethane</td>
</tr>
<tr>
<td>Filter area per filter</td>
<td>48 m²</td>
</tr>
<tr>
<td>Filter class</td>
<td>H13 pursuant EN 1822</td>
</tr>
<tr>
<td>Degree of separation</td>
<td>&gt;99,95% leak-tested in MPPS (Most Penetrated Particle Size)</td>
</tr>
<tr>
<td>Temperature / humidity</td>
<td>110°C/100% RF (relative humidity)</td>
</tr>
<tr>
<td>Filter dimensions (in mm):</td>
<td>610 x 910 x 292</td>
</tr>
<tr>
<td>Handle protection</td>
<td>Expanded metal, double-sided</td>
</tr>
</tbody>
</table>

4.5. Requirement for towing vehicle

- Ball head coupling
- Permissible drawbar load 75 kg
- Ball head 94/20 EG A 50 with min. diameter 49 mm
- Control device not rotatable over 25°

technical changes reserved!
5. Technical description

5.1. Unit description

The dust extraction unit is designed for the collection of mineral, metal and other dry fine and coarse dust in the air.

- mounted on chassis, complete and ready-to-use
- quick relocation possible
- galvanized tandem chassis with hit brake, TÜV approved
- electronic control unit with various special functions
- robust construction, designed for continuous operation
- recoverable filter system (automatic cleaning during operation)
- dust bunker to collect fine and coarse dust
- HEPA-Filter stage
- high air flow velocity at the inlet side to prevent deposits in the suction line
- differential pressure monitoring for filter control
- Manual speed control

5.2. Options

- Automatic control SRE
- Dust bunker with fill level monitoring and emptying via suction connection

5.3. Filter system

The collected fine dust is deposited on the filter surface and forms the “filter cake” (coat). An automatically working Jet-cleaning system ensures the cleaning of the filters during operation. The injection nozzles pull air by a suction effect and jet the coat off the filter, working from inside to the outside. The blown off dust is collected in the dust bunker and can be removed from there.

5.4. Filter cleaning

The cleaning operates automatically when the compressor and the cleaning are switched on. The compressor fills the pressure accumulator, which operates the Jet-cleaning system.

The Deduster is provided with an integrated compressor for short term uses. In case of long term uses, it is essential to use the external compressed air supply!
6. Initial operation

The Mobile Deduster ME12 is supplied ex works and is in a ready-to-use state. In case of visible damages, do not operate the unit. Please contact deconta GmbH immediately.

- Determine the location of the Deduster. Choose it close to the working area to avoid unnecessary long hoses and loss of power.
- Connect suction line of Deduster to working area.
- Establish power supply to Deduster (400V 32A 3N PE)
- Switch on Main switch, make sure the Lamp „Mains Ok“ lights up
- Switch on „Fan“ („Fan active“ lights up) and wait until the motor is running
- Switch on „Cleaning“ („Cleaning active“ lights up). When an external Compressor is connected the lamp "Compressed air external" lights up.
- The unit is operating!
- The desired performance can be set, by turning the rotary knob „Fan control".
6.1. Option automatic control SRE

The main task of the control unit is to measure and to control the required negative pressure in the working area.

- Specify the measuring point in the working area and connect to the connection negative pressure with PE-hose 8 x 1
- Determine the measuring point in the clean area (adjoining rooms) an connect to the connection atmosphere with PE-hose 8 x 1
Manual operation:

In manual operation, the „+“ and „-“ keys are used to set the fan performance. The display show the performance value in „%“ and the measured negative pressure.

Automatic operation:

In automatic mode, the set point in Pascal for the negative pressure is preset with the keys „+“ and „-“ (display set value in automatic mode). By comparing the entered set point value with the permanently measured current actual value (measured negative pressure), the speed of the fan is automatically adapted, that is, the fan moves automatically „up“ and „down“.

Important:

In the event of power failure, the control saves the last set values, restarts automatically after damage elimination and restores the saved data.
6.2. Option Dust bunker with filling level control and emptying via suction port

A full bunker is indicated by two signal lights on the control unit.

When the bunker is full, the alarm socket is supplied with power. An external signal light or signal horn can be connected to this alarm socket.

For emptying the bunker, there are 2 suction connections on the unit.
- Switch off Fan and Cleaning function of the mobile dust extractor!
- Connect the suitable vacuum cleaner to the suction connection
- Open shut-off valve
- The Bunker can now be vacuumed

Please note!
After emptying, the shut-off valve must be closed again.
7. Maintenance

Maintenance work, including changing/removing filters, may only be carried out by authorised persons wearing suitable protective clothing. The appliance must be completely disconnected from the power supply during all repairs and maintenance work.

**We expressly refer to possible additional regional and national regulations in the maintenance of the appliance technology.**

The air-conditioning systems (dust extraction unit, industrial vacuum cleaners and devices used for venting or negative pressurisation) must be serviced as required, at least once a year, and checked by a qualified technician. The test result shall be presented on request.

7.1. Details on filter change

The frequency of the filter change depends on the degree of contamination of the filters. As the filter occupancy is increased (contamination of the filters), the air performance decreases.

For filter monitoring during operation, there are two manometers installed on the device. We recommend a filter change when the “max” mark has been reached.

**Important: Only use approved, flawless filters!**

7.2. Regular maintenance

- Check for air tightness
- Check solenoid valves function properly
- Check oil level of compressor
- Regularly empty dust bunker

After the end of work, release overpressure in pressure accumulator by moving the hand gear.
## 8. Possible disturbances and their elimination

<table>
<thead>
<tr>
<th>Disturbance</th>
<th>Possible reason</th>
<th>Elimination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit does not work</td>
<td>Power source out of order</td>
<td>Have power source repaired by expert</td>
</tr>
<tr>
<td>Unit does not work</td>
<td>Defective components</td>
<td>Have unit repaired by deonta or a workshop authorized by deonta</td>
</tr>
<tr>
<td>Cleaning of filter does not work</td>
<td>Plug of solenoid valve may be loose</td>
<td>Insert plug one more time</td>
</tr>
<tr>
<td>Compressor does not run</td>
<td>Compressor is not switched on</td>
<td>Remove right front panel and switch on compressor</td>
</tr>
<tr>
<td>Compressor does not run</td>
<td>Plug of compressor came off</td>
<td>Remove right front panel and insert plug again</td>
</tr>
</tbody>
</table>

**Caution!**  
Work on the unit may only be carried out in a voltage-free state.
9. Declaration of conformity

EC Declaration of Conformity acc. to Machinery Directive 2006/42 / EC Annex II 1.A

The manufacturer

deconta GmbH
Im Geer 20
46419 Isselburg

hereby confirms that the following product

Product description: mobile dust extraction unit
Type designation: ME 12
Type number: 94, 565

complies with all applicable regulations of the above-mentioned directive and the other applicable
directives (hereafter), including the amendments applicable at the time of the declaration.

The following other EU directives were applied:
   EMC directive 2004/108 / EC

The following harmonized standards were applied:
   EN 60204-1:2006/AC:2010
   EN 60335-2-69:2012

The following national or international standards (or parts / clauses thereof) and specifications were
applied:
   DIN VDE 0701-0702 (VDE 0701-0702):2008-06

Place: Isselburg
Date: 14.11.2016

(Wilhelm Weßling)
Director